

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims:

19. (currently amended) An integrated multimedia system having a multimedia processor disposed in an integrated circuit, said system comprising:

- a first host processor system coupled to said multimedia processor;
- a second local processor disposed within said multimedia processor for controlling the operation of said multimedia processor;
- a data transfer switch disposed within said multimedia processor and coupled to said second processor for transferring data to various modules of said multimedia processor, wherein said data transfer switch is configured to transfer data between said modules of said multimedia processor in either direction between at least two modules within said multimedia processor as requested by said modules;
- a data streamer coupled to said data transfer switch, and configured to schedule simultaneous data transfers among a plurality of modules disposed within said multimedia processor, at least one of which is a cache memory, in accordance with corresponding channel allocations;
- an interface unit coupled to said data streamer having a plurality of input/output (I/O) device driver units;
- a multiplexer coupled to said interface unit for providing access between a selected number of said I/O device driver units to external I/O devices via

output pins; and

a plurality of external I/O devices coupled to said multimedia processor.

20. (previously presented) The system in accordance with claim 19, wherein said external I/O devices are controlled by a corresponding one of said I/O device driver units.

21. (previously presented) The system in accordance with claim 20, wherein one of said external I/O device is an NTSC decoder.

22. (previously presented) The system in accordance with claim 20, wherein one of said external I/O device is an NTSC encoder.

23. (previously presented) The system in accordance with claim 20, wherein one of said external I/O device is a demodulator unit configured to demodulate wireless communications signals.

24. (previously presented) The system in accordance with claim 23, wherein said demodulator unit communicates with said multimedia processor in accordance with a transport channel interface arrangement.

25. (previously presented) The system in accordance with claim 20,

wherein said multimedia processor provides video signals and three dimensional graphic signals to an external video display device.

26. (previously presented) The system in accordance with claim 20, wherein one of said external I/O device is an ISDN interface.

27. (previously presented) The system in accordance with claim 20, wherein one of said external I/O device is an audio coder and decoder (CODEC) unit.

28. (currently amended) An integrated multimedia system having a multimedia processor disposed in an integrated circuit, said system comprising:

a processor disposed within said multimedia processor for controlling the operation of said multimedia processor;

a data transfer switch disposed within said multimedia processor and coupled to said processor for transferring data to various modules of said multimedia processor, wherein said data transfer switch is configured to transfer data between said modules of said multimedia processor in either direction between at least two modules within said multimedia processor as requested by said modules;

a data streamer coupled to said data transfer switch, and configured to schedule simultaneous data transfers among a plurality of modules disposed within said multimedia processor, at least one of which is a cache memory, in accordance with corresponding channel allocations;

an interface unit coupled to said data streamer having a plurality of

input/output (I/O) device driver units;

a multiplexer coupled to said interface unit for providing access between a selected number of said I/O device driver units to external I/O devices via output pins; and

a plurality of external I/O devices coupled to said multimedia processor.

29. (previously presented)The system in accordance with claim 28, wherein said external I/O devices are controlled by a corresponding one of said I/O device driver units.

30. (previously presented)The system in accordance with claim 29, wherein one of said external I/O device is an NTSC decoder.

31. (previously presented)The system in accordance with claim 29, wherein one of said external I/O device is an NTSC encoder.

32. (previously presented)The system in accordance with claim 29, wherein one of said external I/O device is a demodulator unit configured to demodulate wireless communications signals.

33. (previously presented)The system in accordance with claim 32, wherein said demodulator unit communicates with said multimedia processor in

accordance with a transport channel interface arrangement.

34. (previously presented) The system in accordance with claim 29, wherein said multimedia processor provides video signals and three dimensional graphic signals to an external video display device.

35. (previously presented) The system in accordance with claim 29, wherein one of said external I/O device is an ISDN interface.

36. (previously presented) The system in accordance with claim 29, wherein one of said external I/O device is an audio coder and decoder (CODEC) unit.

37. (previously presented) The system in accordance with claim 19, further comprising a cache memory directly coupled to said second local processor and said data transfer switch.

38. (previously presented) The system in accordance with claim 28, wherein said cache memory is directly coupled to said processor and said data transfer switch.

39. (previously presented) The system in accordance with claim 19, wherein said plurality of modules among which said data streamer configures to schedule simultaneous data transfers include the interface unit which is capable of controlling the

external I/O devices, and a memory controller which is capable of controlling an external memory.

40. (previously presented) The system in accordance with claim 28, wherein said plurality of modules among which said data streamer configures to schedule simultaneous data transfers include the interface unit which is capable of controlling the external I/O devices, and a memory controller which is capable of controlling an external memory.

41. (previously presented) The system in accordance with claim 39, wherein said plurality of modules among which said data streamer configures to schedule simultaneous data transfers further include another interface unit which is capable of controlling said first processor.

42. (previously presented) The system in accordance with claim 40, wherein said plurality of modules among which said data streamer configures to schedule simultaneous data transfers further include another interface unit which is capable of controlling a first host processor.

43. (previously presented) The system in accordance with claim 19, wherein said data transfer switch further comprises a plurality of buses.

44. (previously presented) The system in accordance with claim 28,